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New Family of Ethernet Switches Provides the Industry's Most Complete Time Sensitive Networking Feature Set

Microchip's SparX-5i family of Ethernet switches enables increased connectivity and network optimization while lowering costs for industrial automation networks

CHANDLER, Ariz., Feb. 03, 2021 (GLOBE NEWSWIRE) -- With the support of Time Sensitive Networking (TSN), Ethernet is eliminating the need for separate Information Technology (IT) and Operational Technology (OT) networks, providing a more ubiquitous approach to synchronization and precision timing for today's industrial automation systems. However, to accomplish this, the use of multi-chip proprietary solutions has often been required, increasing both complexity and costs for developers. To help eliminate reliance on such sole-sourced, expensive and proprietary solutions for deterministic communications, Microchip Technology Inc. **(Nasdaq: MCHP)** today announced its **SparX-5i family of Ethernet switches** – a single-chip, IEEE standards-based solution that offers the industry's most complete TSN feature set.

The SparX-5i family supports the key TSN IEEE standards needed for a complete real-time communication solution. These include IEEE 1588v2 and IEEE 802.1AS-REV profile for Time Synchronization, IEEE 802.1Qbv for Traffic Shaping, IEEE 802.1Qbu/802.3br for Delay Reduction, IEEE 802.1Qci for Stream Policing and IEEE 802.1CB for Seamless Redundancy. Offering these standards in a single chip guarantees end-to-end transmission of high-priority traffic with extremely low latency. In addition, the family supports standard L2/L3 Ethernet with up to 200G of bandwidth, incorporating 100M, 1G, 2.5G, 5G, 10G and 25 GbE interfaces for the most flexible connectivity solution available in the market.

"With Microchip's SparX-5i family of Ethernet switches, we're providing our customers with a simplified pathway to a TSN compatible infrastructure, helping them achieve real-time data communication across their entire network," said Charles Forni, vice president of Microchip's USB and networking business unit. "The SparX-5i family is the first Microchip device in a line of TSN switch developments that will address all levels of the industrial automation network, from the field bus to the factory backbone."

In addition to the SparX-5i family, Microchip also provides the SparX-5 family of enterprise Ethernet switches supporting standard L2/L3 Ethernet with up to 200G of bandwidth, incorporating 100M, 1G, 2.5G, 5G, 10G and 25 GbE interfaces.

Development Tools
The **VSC6817SDK IStaX Linux Application Software** is a turnkey industrial Ethernet switch software solution designed to support Microchip's managed Ethernet switch devices. The software uses the latest Linux® operating system for optimal performance and cost-effective implementation. It's highly integrated with advanced L2+ switch features, such as QCLs and ACLs, and includes support for key TSN features.

In addition, Microchip offers an Ethernet Switch and PHY Application Programming Interface (VSC6803API) – MESA – providing a comprehensive, user-friendly function library that is operating-system independent. Evaluation boards and reference designs are also available upon request.

Availability
SparX-5i and SparX-5 switches are available in volume production. For additional information or to purchase products mentioned here, contact a Microchip sales representative, authorized worldwide distributor or visit Microchip's website. To purchase silicon products mentioned here visit **Microchip's purchasing portal**.

Resources
High-res images available through Flickr or editorial contact (feel free to publish):

- Application image: **https://www.flickr.com/photos/microchiptechnology/50720576366**
- Chip image: **https://www.flickr.com/photos/microchiptechnology/50721090632**

About Microchip Technology
Microchip Technology Inc. is a leading provider of smart, connected and secure embedded control solutions. Its easy-to-use development tools and comprehensive product portfolio enable customers to create optimal designs which reduce risk while lowering total system cost and time to market. The company's solutions serve more than 120,000 customers across the industrial, automotive, consumer, aerospace and defense, communications and computing markets. Headquartered in Chandler, Arizona, Microchip offers outstanding technical support along with dependable delivery and quality. For more information, visit the Microchip website at **www.microchip.com**.

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